

REMARKS

Claims 1-7, 11-18 and 24-34 are pending. Claims 8-18 and 19-22 have been cancelled. New claim 35 has been added.

Paragraphs 3 and 4 of the Office Action

Claims 1,2, 6, 23, 25-27, and 30-34 have been rejected under 35 U.S.C. 103 as being unpatentable over Hart (GB 2205295) in view of DE 2105427. This rejection is respectfully traversed because neither Hart nor DE 2105427 provide any teaching, disclosure or suggestion of the combination of limitations set forth under any of the pending claims of the present application. Specifically, there is no motivation for one of ordinary skill in the art to combine Hart with DE 2105427 in a manner that renders any of the pending claims obvious under 35 U.S.C. 103.

There is no motivation for one of ordinary skill in the art to combine the disclosure of Hart with the disclosure of DE 2105427 because:

1. There is no mention of DE 2105427 in Hart.
2. The preferred adhesion process for adhering a metallic label to a bottle under Hart requires an adhesive coating between the metallic label and the bottle. In contrast, the adhesion processes discussed in DE 2105427 does not involve an adhesive coating.
3. Hart expressly states that it is undesirable to use an adhesion process where the exterior surface of a bottle is degreased, cleaned and dried. In contrast, DE 2105427 requires that the plastic sheet and the metal layers each be subject to a degreasing bath, multiple wash baths, a chemical bath and drying before being fused together.
4. Hart requires an adhesion process that can be used on a bottle while DE 2105427 is directed to fusing an unformed plastic sheet between two metal layers using a preheating furnace and a roll press.

Hart is specifically directed to a means of reducing the loss of carbon dioxide through a pre-formed polyethylene (PET) bottles holding carbonated drinks (see, *e.g.*, Hart at p. 1) There is no mention of DE 2105427 in (or the techniques disclosed therein) in Hart. As a result, one of

ordinary skill in the art would not be immediately directed to DE 2105427 upon a reading of Hart.

In the preferred embodiment of Hart, a label is secured to the bottle by a continuous layer of adhesive between the label and the bottle (Hart at p. 3). Because the expressed preferred embodiment of Hart uses an adhesive layer, one of ordinary skill in the art would be motivated to search for bonding techniques that use an adhesive layer to couple a label to a container. However, the adhesion processes discussed in DE 2105427 does not involve an adhesive coating as stated in the first full paragraph of DE 2105427 (DE 2105427 at p. 2):

“Die Erfindung bezieht sich auf ein Verfahren zur Herstellung eines Verbundschichtstoffs aus einer Kunststoffschicht und mindestens einer Metallschicht durch unmittelbare Schmelzverklebung der Kunststoffschicht mit der Metallschicht.”

This text translates¹ to:

“The invention refers to a procedure for the production of group laminated material from a plastic film and at least one layer of metal by direct fusion gluing of the plastic film with the layer of metal.”

Fusing a metal layer to an unformed plastic film without an adhesive coating is contrary to the preferred embodiment described in Hart. Accordingly, one of ordinary skill in the art attempting to carry out the preferred embodiment in Hart would not use the techniques discussed in DE 2105427.

Hart expressly states that degreasing and cleaning of a bottle by washing with a detergent/water solution (followed by drying over the bottle) is undesirable because it “adds unacceptably to the cost of the bottles” (Hart at p. 2). As a result, one of ordinary skill in the art would be motivated to search for bonding techniques to use with Hart would look for processes that did not involve degreasing and cleaning. However, the bonding technique of DE 2105427 requires a degreasing bath and multiple wash baths, a chemical bath and drying before the plastic sheet and metal layers can be fused together. This understanding is supported by the Figure included in DE

¹ All translations in this Response were obtained using the Google Translate Tool at http://translate.google.com/translate_t.

2105427 and supporting text (DE 2105427 pp. 7-8) which states:

“Ein Ausführungsbeispiel einer Anlage zur Durchführung des erfindungsgemäßen Verfahrens wird im folgenden unter Bezugnahme auf die Zeichnung beschrieben, die in einer Figur eine solche Anlage schematisch veranschaulicht.

In zwei Vorbehandlungslinien A und C werden zwei Aluminiumbänder jeweils einer Haspel 1 entnommen und durch ein Entfettungsbad 2, ein Waschbad 3, ein Eloxierbad 4, ein Waschbad 5 und eine Trockenstrecke 6 geführt, die jeweils auf die dem Kunststoffkern zugekehrte Oberfläche wirken. Über Umlenkrollen 7,8, werden sie dem Vorwärmofen 9 zugeführt.

In der Vorbehandlungslinie B wird das Kunststoffband einer Haspel 10 entnommen und durch ein Entfettungsbad 11, Waschbad 12, ein chemisches Sudbad 13 zur beidseitigen oxydativen Behandlung, ein Waschbad 14 und eine Trockenstrecke 15 geführt, wonach es gleichfalls in den Vorwärmofen 9 gelangt.

In der gemeinsamen BEhandlungslinie D wandern die drei Schichten zunächst durch den Vorwärmofen 9, in welchem sie auf die Preßtemperatur gebracht werden; in der Rollenpresse 16 werden sie kontinuierlich verpreßt, gegebenenfalls anschließend in nicht gezeichneter Weise gekühlt, falls diese zweckmäßig erscheint, und schließlich im fertigen Zustand auf die Haspel 17 aufgewickelt.”

This text translates to:

“A remark example of a plant for the execution of the procedure according to invention is described in the following with reference to the design, which illustrates such a plant in a figure schematically.

In two pretreatment lines A and C are inferred two Aluminium strips from a hasp 1 in each case and led by a defatting bath 2, a wash bath 3, an anodizing bath 4, a wash bath 5 and a dry section 6, which in each case affect course-turned surface those the plastic core. By way of guide rollers 7.8, they are supplied to the preheating furnace 9.

In the pretreatment line the plastic volume of a hasp 10 is taken from B and led by a defatting bath 11, Wash bath 12, a chemical Sud bath 13 for reciprocal oxydativen treatment, a wash bath 14 and a dry section 15, according to which it arrives also into the preheating furnace 9.

In the common treatment line D the three layers move first by the preheating furnace 9, into which them on the press temperature are brought; in the role press 16 they are continuously injected, are not cooled if necessary afterwards in not drawn way, if this appears appropriate, and finally in the finished condition on the hasp 17 rolled up.”

Thus, the Figure and translation of the supporting text in DE 2105427 disclose that the fusing technique of DE 2105427 requires that a unformed plastic sheet pass through a defatting bath 11 (i.e., a degreasing bath), a first wash bath 12, some sort of a chemical bath 13, a second wash bath 14 and then a drying section 15 before it can be fused between the two metal layers with the preheating furnace 9 and roll press 16. This process is completely contrary to the expressed undesirability of degreasing and cleaning in Hart and, in fact, Hart teaches away from such a technique. One of ordinary skill in the art looking at Hart would be motivated to find a label adhesion technique that does not require degreasing and cleaning because Hart expressly states that such techniques are undesirable. As result, one of ordinary skill in the art would not be motivated at all to combine the techniques disclosed in Hart with those disclosed in DE 2105427.

Hart also requires an adhesion process that can be used on a pre-formed bottle so that the bottle can later be used to hold beverages and/or food items and, in particular, carbonated beverages. As a result, one of ordinary skill in the art would be motivated to search for adhesion techniques that would work on pre-formed bottles so that the bottle could later be used to hold beverages and/or food items.

However, this ability is not possible if the techniques of DE 2105427 are applied to Hart. DE 2105427 is directed to fusing an unformed plastic sheet between two metal layers. According to the Figure and translation of the supporting text in DE 2105427, the unformed plastic sheet (obtained from hasp 10, i.e., a spindle) is heated between two metal layers in preheating furnace 9 and then pressed together in roll press 16. Thus, it is clear that DE 2105427 discloses a technique for fusing a pair of metal layers to a sheet of plastic and not fusing a metal layer to a pre-formed container. Hart is not directed to processes relating to adhesion of metallic layers to unformed plastic films. Hart requires an adhesion process that can be used on a PET bottle. Subjecting a PET bottle to the process of DE 2105427 would crush and deform the bottle. This would render the bottle useless for the purposes needed in Hart.

The above discussion clearly shows that there is no motivation to combine Hart with DE 2105427 because there is no mention of DE 2105427 in Hart; the preferred adhesion process for

adhering a metallic label to a bottle under Hart requires an adhesive coating between the metallic label and the bottle while the adhesion processes discussed in DE 2105427 does not involve an adhesive coating; Hart expressly states that it is undesirable to use an adhesion process where the exterior surface of a bottle is degreased, cleaned and dried while DE 2105427 requires that the plastic sheet and the metal layers each be subject to a degreasing bath, multiple wash baths, a chemical bath and drying before being fused together; and Hart requires an adhesion process that can be used on a bottle while DE 2105427 is directed to fusing an unformed plastic sheet between two metal layers using a preheating furnace and a roll press. Without establishing a motivation to combine Hart with DE 2105427, there can be no finding of obviousness using these references. As a result, claims 1, 2, 6, 23, 25-27, and 30-34 cannot be found obvious under Hart in view of DE 2105427. Therefore, for at least the reasons discussed above, claims 1, 2, 6, 23, 25-27, and 30-34 are believed to be patentably distinguishable over Hart in view of DE 2105427. Withdrawal of this rejection is respectfully requested.

Paragraph 5 of the Office Action

Claims 3-5 have been rejected under 35 U.S.C. 103(a) as being unpatentable over Hart and DE 2105427 as applied to claims 1, 2, 6, 23, 25-27, and 30-34 above, and further in view of the admitted prior art. Claims 3-5 depend from claim 1. By reason of their dependency, claims 3-5 are believed to be allowable over the cited prior art for at least the same reasons previous set forth for claim 1. Withdrawal of this rejection is respectfully requested.

Paragraph 6 of the Office Action

Claim 7 is rejected under 35 U.S.C. 103(a) as being unpatentable over Hart and DE 2105427 as applied to claims 1, 2, 6, 23, 25-27, and 30-34 above, and further in view of Kelch et al. (U.S. Patent 6,042,930). Claim 7 depends from claim 1. By reason of its dependency, claim 7 is believed to be allowable over the cited prior art for at least the same reasons previous set forth for claim 1. Withdrawal of this rejection is respectfully requested.

Paragraph 7 of the Office Action

Claim 24 is rejected under 35 U.S.C. 103(a) as being unpatentable over Hart and DE 2105427 as applied to claims 1, 2, 6, 23, 25-27, and 30-34 above, and further in view of Yoda et al. (U.S.

Patent 3,961,009). Claim 24 depends from claim 23. By reason of its dependency, claim 23 is believed to be allowable over the cited prior art for at least the same reasons previously set forth for claim 23. Withdrawal of this rejection is respectfully requested.

Paragraph 8 of the Office Action

Claims 28 and 29 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hart and DE 2105427 as applied to claims 1, 2, 6, 23, 25-27, and 30-34 above, and further in view of Swierczek (U.S. Patent 5,024,014). Claim 28 depends from claim 27 which depends from claim 23. Claim 29 depends from claim 28. By reason of their dependency, claims 28 and 29 are believed to be allowable over the cited prior art for at least the same reasons previously set forth for claim 23. Withdrawal of this rejection is respectfully requested.

Paragraph 9 of the Office Action

Claims 11, 12, 16 and 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hart (GB 2205295) in view of Yamanaka (U.S. Patent 5,254,302). Claims 11, 12, 16 and 17 have been cancelled.

Paragraph 10 of the Office Action

Claims 13 and 15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hart and Yamanaka as applied to claims 11, 12, 16, and 17 above, and further in view of the admitted prior art. Claims 13 and 15 have been cancelled.

Paragraph 11 of the Office Action

Claim 18 is rejected under 35 U.S.C. 103(a) as being unpatentable over Hart and Yamanaka as applied to claims 11, 12, 16, and 17 above, and further in view of Kelch et al. (U.S. Patent 6,042,930). Claim 18 has been cancelled.

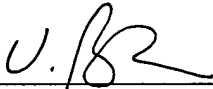
If for any reason an insufficient fee has been paid, the Examiner is hereby authorized to charge the insufficiency to Deposit Account No. 05-0150.

If the Examiner has any questions or needs any additional information, the Examiner is invited to telephone the undersigned attorney at (650) 843-3215.

Date: April 16, 2004

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